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PAE99-109TRDE
Our File: P23505EP

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Claims

1. Communication device (1) for transmitting and receiving data in a communication system, in which a random access channel with a plurality of access resources is provided,
- 10 selecting means (5) for randomly selecting an access resource from said plurality of access resources on the basis of an access probability distribution being allocated to said communication device (1), said access probability distribution defining the probability of a random access to said access resources, whereby at least two access resources have a different access probability, and
- 15 transmitting means (3) for transmitting a random access burst in said randomly selected access resource.
2. Communication device (1) according to claim 1,
characterized in,
- 20 that said plurality of access resources is divided in at least two access resource groups, whereby the communication device (1) is allocated to one of the access resource groups and said selecting means (5) randomly selects an access resource only from said allocated access resource group on the basis of said access probability distribution.
- 25 3. Communication device (1) according to claim 1 or 2,
characterized by
a memory means (7) in which said access probability distribution is stored.
- 30 4. Communication device (1) according to claim 3,
characterized in,
that said memory means (7) is a fixed part of the communication device.
5. Communication device (1) according to claim 3,
characterized in,
- 35 that said memory means (7) is part of a device which is connectable to the communication device.
6. Communication device (1) according to claim 5,
characterized in

being a mobile terminal of a wireless telecommunication system, whereby said device is a subscriber identity module.

7. Communication device (1) according to claim 5,
5 **characterized in**
being a mobile terminal of a wireless telecommunication system, whereby said device is a memory stick.
8. Communication device (1) according to one of the claims 1 to 7,
10 **characterized in,**
that said access probability distribution is changed upon the occurrence of a specific event.
9. Communication device (1) according to claim 8,
15 **characterized in,**
that said specific event is the reception of a corresponding information from another communication device.
10. Communication device (1) according to claim 8,
20 **characterized in,**
that said specific event is a timepoint.
11. Communication device (1) according to one of the claims 1 to 10,
25 **characterized in,**
being a mobile terminal of a wireless UMTS system, whereby said access resources of said random access channel are defined by time slots and signature codes.
12. Communication method for transmitting and receiving data in a communication system, in which a random access channel with a plurality of access resources is
30 provided, with the steps of
randomly selecting an access resource from said plurality of access resources on the basis of an access probability distribution, said access probability distribution defining the probability of a random access to said access resources, whereby at least two access resources have a different access probability, and
35 transmitting a random access burst in said randomly selected access resource.
13. Communication method according to claim 12,
characterized in,

that said plurality of access resources is divided in at least two access resource groups, whereby one or more communication devices of the communication system are allocated to each of the access resource groups and each communication device randomly selects an access resource only from an allocated access resource group on the
5 basis of an access probability distribution.

14. Communication method according to claim 12 or 13,
characterized in,
that said access probability distribution is changed upon occurrence of a specific event.
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15. Communication method according to claim 14,
characterized in,
that said specific event is the reception of a corresponding information from another communication device.
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16. Communication method according to claim 14,
characterized in,
that said specific event is a timepoint.

20 17. Communication method according to one of the claims 12 to 16,
characterized in,
that said communication system is a wireless UMTS system, whereby said access resources of said random access channel are defined by time slots and signature codes.